

Title (en)

MAGNETIC DEVICE SUITABLE FOR USE AS A POWER GENERATOR OR DRIVE MOTOR

Title (de)

MAGNETISCHE VORRICHTUNG ZUR VERWENDUNG ALS STROMGENERATOR ODER ANTRIEBSMOTOR

Title (fr)

DISPOSITIF MAGNÉTIQUE APPROPRIÉ POUR ÊTRE UTILISÉ COMME GÉNÉRATEUR D'ÉNERGIE OU COMME MOTEUR À IMPULSION

Publication

EP 3512082 A4 20200527 (EN)

Application

EP 17814795 A 20170517

Priority

- ES 201630853 A 20160623
- ES 2017070321 W 20170517

Abstract (en)

[origin: EP3512082A1] Magnetic device adapted to be used as generator or as driving motor. It is comprised coupled to a shaft (2) with possibility of rotation, of at least, a first disk (3) and a second disk (4) identical in its shape with several magnetic poles (5) and without possibility of rotation, a central winding (6) located between both disks (3, 4). The magnetic poles (5) are radially located in both disks, with the polarity successively alternating, positive and negative; and the central winding (6) is comprised of, at least, two coils the core of which (7) has configuration that presents, on both lateral sides, ends having tilted or staggered sides (71), towards a same side with respect to the shaft (2), ending in a point (72); the said cores (7) are located at such a distance between them that their ends having tilted or staggered sides (71) with a point (72), are lapping each other on an external element (9) that gives a movement to a first disk (3). The magnetic poles (5) are incorporated in number, position and magnetic force similar on each of the disks (3, 4). The cores (7) of the coils are bodies of configuration in diamond-shaped front elevation. The points (72) of the cores (7) are not covered by the winding core (8) of wires.

IPC 8 full level

H02K 7/11 (2006.01); **H02K 21/24** (2006.01); **H02K 35/02** (2006.01); **H02K 49/10** (2006.01); **H02K 51/00** (2006.01); **H02K 53/00** (2006.01); **H02K 7/08** (2006.01); **H02K 16/02** (2006.01); **H02K 49/06** (2006.01)

CPC (source: EP ES)

H02K 16/02 (2013.01 - EP); **H02K 21/24** (2013.01 - EP); **H02K 35/02** (2013.01 - ES); **H02K 51/00** (2013.01 - EP); **H02K 53/00** (2013.01 - ES); **H02K 1/12** (2013.01 - EP); **H02K 7/086** (2013.01 - EP); **H02K 99/00** (2016.10 - EP)

Citation (search report)

- [A] JP 5450361 B2 20140326
- [A] US 2012146445 A1 20120614 - TOKOI HIROOKI [JP], et al
- [A] DE 2650510 A1 19770518 - PHILIPS NV
- [A] JP 2006238623 A 20060907 - FUJITSU GENERAL LTD
- [A] WO 2013084556 A1 20130613 - KOMATSU MFG CO LTD [JP], et al
- [A] CN 104734438 A 20150624 - HARBIN INST OF TECHNOLOGY
- See references of WO 2017220826A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3512082 A1 20190717; **EP 3512082 A4 20200527**; **EP 3512082 B1 20221130**; DK 3512082 T3 20230306; ES 2608468 A1 20170411; ES 2608468 B1 20180207; ES 2939377 T3 20230421; PL 3512082 T3 20230411; PT 3512082 T 20230301; WO 2017220826 A1 20171228

DOCDB simple family (application)

EP 17814795 A 20170517; DK 17814795 T 20170517; ES 17814795 T 20170517; ES 201630853 A 20160623; ES 2017070321 W 20170517; PL 17814795 T 20170517; PT 17814795 T 20170517